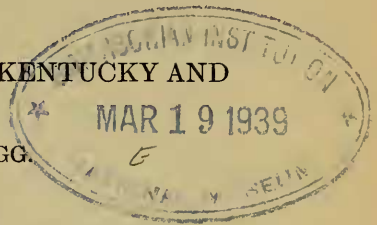


PROCEEDINGS  
OF THE  
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A NEW RED-BACKED MOUSE FROM KENTUCKY AND  
VIRGINIA.

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The identification of mammals secured during the past two years in Tennessee and Kentucky by field parties from the United States National Museum has resulted in the recognition of a new geographic race of the red-backed mouse. This form may be known as:

*Clethrionomys gapperi maurus*, subsp. nov.

*Type specimen*.—♀ adult, skin and skull, no. 267826, U. S. National Museum; Black Mountains,  $4\frac{1}{2}$  miles southeast of Lynch, altitude 4100 feet, Harlan County, Kentucky; collected by Watson M. Perrygo and J. Cole; June 23, 1938; original number 705.

*Range*.—From Black Mountains, Harlan County, Kentucky, eastward to Big Stone Gap, Cumberland Mountains, Wise County, Virginia, and northward along Walker Mountains at least to Mountain Lake, Giles County, Virginia.

*General characters*.—Similar in size to *Clethrionomys gapperi carolinensis* of eastern Tennessee, but pelage noticeably darker, dorsal stripe Mars brown and more perceptibly overlain with black-tipped hairs; sides duller and darker; and tail less distinctly bicolor. Somewhat larger than *Clethrionomys gapperi gapperi* and decidedly darker, the upperparts lacking the rich ochraceous wash of the latter.

*Color*.—Summer pelage: Mass effect of upperparts rich Mars brown (Ridgway, 1912), the broad dorsal stripe extending from top of head to base of tail being noticeably darkened by numerous black-tipped hairs; sides of face and body dull buffy, the individual light colored hairs ranging from buff to light ochraceous buff; underparts grayish white washed by buff; feet silvery cinnamon drab; tail unicolored or indistinctly bicolored, thickly haired, with upper surface and pencil black, and with under surface on occasional specimens having a frosted appearance owing to lighter tips of dark hairs.

*Young*.—When half grown, similar to adults, but mass effect of upperparts is duller and the coloration of the sides is darker,

*Skull.*—About like that of *Clethrionomys gapperi carolinensis* in size, general form, and length of cheek tooth row, but with zygomatic arches less widely spreading anteriorly. Similar to skull of *Clethrionomys gapperi gapperi*, but somewhat larger and with bullae more noticeably inflated.

*Measurements.*—Type: Total length, 172; tail, 39; hind foot, 20. Condylbasal length, 26.3; rostral length, 7.2; rostral breadth, 4.6; interorbital breadth, 4.4; zygomatic breadth, 14.7; incisive foramina, 5.2; height of skull at bullae, 9.5; and alveolar length of cheek teeth row, 5.9.

Average of 6 adult female topotypes, including type: Total length, 153.8 (147–172); tail, 37.8 (36–41); hind foot, 19.5 (19–20). Skull, condylbasal length, 24.8 (24.1–26.3); rostral length, 6.8 (6.4–7.2); rostral breadth, 4.6 (4.5–4.8); interorbital breadth, 4.2 (4–4.4); zygomatic breadth, 14.1 (13.5–14.7); length incisive foramina, 4.7 (4.4–5.2); height of skull at bullae, 9.4 (9.2–9.6); and alveolar length of cheek tooth row, 5.4 (5–5.9).

Of 2 adult male topotypes, respectively: Total length, 155, 146; tail, 42, 35; hind foot, 20, 19. Skull, condylbasal length, —, 25.2; rostral length, 7, 7.2; rostral breadth, 4.9, 4.5; interorbital breadth, 4, 4.3; zygomatic breadth, 14.4, 13.8; length incisive foramina, 5, 5; height of skull at bullae, —, 9.5; and alveolar length of cheek tooth row, 5.3, 5.3.

*Remarks.*—This race is distinguished from other forms of *Clethrionomys gapperi* by the darker coloration of the upperparts and by the duller buff color of the sides. Six specimens of *Clethrionomys gapperi carolinensis* from 6000 to 6300 feet altitude on Roan Mountain, Carter County, Tennessee, which were taken during September, 1937, by W. M. Perrygo and H. Schaefer, are darker than the average, but are readily distinguishable from the new race. The darker coloration of these Roan Mountain specimens indicates, however, that intergradation between the two races may be expected to occur in the southern Allegheny Mountains along the northeastern border of Tennessee. One specimen (No. 267836, U. S. N. M.) in the series from the Black Mountains approaches the above mentioned specimens of *carolinensis* in general coloration of the upperparts and in the presence of a lighter colored dorsal stripe.

The specimens allocated to the new race *maurus* have a pelage coloration that is quite unlike the color phase represented by the dark backed specimens of *Clethrionomys gapperi*, which J. A. Allen (1894, Bull. Amer. Mus. Nat. Hist., vol. 6, p. 103) named *Eutamias fuscodorsalis* or which G. S. Miller, Jr. (1897, Proc. Boston Soc. Nat. Hist., vol. 28, p. 16) referred to as the "brown phase" and V. Bailey (1897, Proc. Biol. Soc. Washington, vol. 11, p. 123) called the "gray animal." A series of 51 *gapperi* collected by Miller during the months of August, September and October in Ontario on the north shore of Lake Superior comprised 46 in the red phase and 5 in the brown phase. Miller concluded that *gapperi* assumes these dichromatic pelages "independently of age, sex, or season." These specimens from Ontario, New Brunswick, and elsewhere in British America are not, however, grayish, but are characterized by the replacement of the usual russet dorsal stripe by a sharply defined blackish brown [1] (Ridgway, 1912) stripe which is strongly contrasted with the lighter sides of the body, the light colored hairs being nearer either cream buff or yellowish olive.

Most of the specimens obtained by Perrygo and Cole in the Black Mountains were taken in large size Schuyler traps nailed to the trunks of spruce trees 5 or 6 feet above the ground. These traps were set for flying squirrels and were baited with bird bodies. The others were taken in runways in moss growing among rocks and the roots of spruce trees. Three specimens were trapped by Arthur H. Howell on July 28–29, 1908, in damp shady ravines among rocks and fallen timber on the slope of the gap in the Cumberland Mountains about a mile west of Big Stone Gap. These mice were partially devoured by other animals while caught in the traps. A male belonging to the Mountain Lake Biological Station of the University of Virginia, which was submitted for identification by Maurice Brooks, was trapped among rocks at the north end of the lake.

*Specimens examined.*—Fifteen, from the following localities: Kentucky—Harlan County, Black Mountains,  $4\frac{1}{2}$  miles southeast of Lynch, altitude 4000 to 4100 feet, 11. Virginia—Wise County, Big Stone Gap, altitude 1800 to 2000 feet, 3; Giles County, Mountain Lake, altitude 4000 feet, 1.